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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,102	09/26/2003	Atsushi Nakajima	KON-1829	1185
20311	7590	01/25/2005	EXAMINER	
MUSERLIAN, LUCAS AND MERCANTI, LLP 475 PARK AVENUE SOUTH 15TH FLOOR NEW YORK, NY 10016			MCCLENDON, SANZA L	
			ART UNIT	PAPER NUMBER
			1711	

DATE MAILED: 01/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/673,102

Applicant(s)

NAKAJIMA, ATSUSHI

Examiner

Sanza L McClendon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>6/04</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Information Disclosure Statement*

2. The information disclosure statement (IDS) submitted on 6/01/2004 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the examiner is considering the information disclosure statement.

### *Specification*

3. The disclosure is objected to because of the following informalities: The section for Brief Description of the Drawings is missing.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 112*

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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5. Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear in claim 7 if applicant is intending for the composition to have at least one of an epoxy compound and at least one of a vinyl ether compound, or if applicant is intending for the composition to have at least one of either the epoxy compound or the vinyl ether. Clarification if requested.

*Claim Rejections - 35 USC § 102*

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Laksin et al (6,232,361).

Laksin et al teaches radiation curable printing inks useful in ink-jet printing methods. Said compositions comprise combining cationic resin resins with hydroxy functional cyclic ethers, water, pigments and photoinitiators. Said cationic resin can be epoxide resins, such as those found in column 3, lines 50 to the end. Laksin et al teaches said epoxy resins can be replaced with or combined with oxetane compounds, such as those found in US 5,721,020 to Takami (which is incorporated by reference), or said cationic compounds can comprise both epoxy and oxetane moieties, wherein the teaching of the oxetane compounds and those disclosed by Takami et al are deemed to anticipate the oxetane compounds of claims 7-13. Said hydroxy-functional cyclic ethers can be found in column 4 to column 5, which reads on the oxetane compound in claims 7-8. In addition, Laksin et al teaches said ink composition can have additional components, such as free

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radical polymerizable components. This anticipates claim 16. These can be found in columns 7-8, wherein it is taught that said coating compositions will contain less than 35-wt% of these components. The examiner deems this teaching anticipates applicants lower limitations as found in claim 18 and the lower limits up to at least less than 35-wt% of claim 17. The colorants (pigments) can be found in column 6 to column 7. The cationic photoinitiators can be found in column 6. The Per example 2, Laksin et al illustrates the ink compositions exhibits a Newtonian behavior over a wide range of shear rates (100 sec<sup>-1</sup> to 2500 sec<sup>-1</sup>) and are suitable for ink-jet printing. Therefore it is deemed by the examiner that the conventional methods of claims 19-20 are read by the reference. The examiner is interpreting claim 7 as having either an epoxy compound or a vinyl ether compound and not both—see above 112, 2<sup>nd</sup> rejection—therefore the compositions of Laksin et al are deemed to anticipate applicant's claimed invention as written; and thusly, the compositions of Laksin et al, in the absence of unexpected results and/or evidence to the contrary, should inherently have the same properties as claimed by applicant.

8. Claims 1-8 and 14-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Sanenobu (JP2001-220526).

Sanenobu teaches UV-curable ink compositions for ink-jet recording systems. Said compositions comprise (1) a cationic initiator, (2) an epoxide compound, (3) a vinyl ether compound, (4) a hydroxy-containing oxetane compound, and optionally (5) a free radical polymerizable compound, and (6) a free radical photoinitiator for (5). This is deemed to anticipate the composition of claim 1. Additionally, additives such as colorants, bulking agents and others found in paragraph [0041]. Said composition anticipates claims 6-8 and 16. Component (2) can be found in amounts from 47-63% by weight, component (4) can be found in amounts from 17 to 51.5% by weight in the composition, and, per examples 14-16, component (6) can be found in compound in amounts up to at least 30% by weight. Therefore claims 14-15 and 17-18 are anticipated. The examiner is interpreting claim 7 as having both an epoxy compound and a vinyl ether compound—see above 112, 2<sup>nd</sup> rejection—therefore the compositions of Sanenobu are deemed to anticipate applicant's claimed invention as written; and thusly, the compositions of Sanenobu, in the absence of unexpected results and/or evidence to the contrary, should inherently have the same

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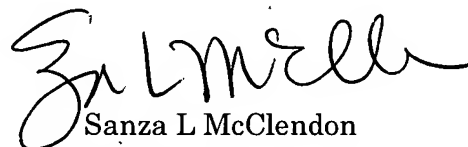
properties as those claimed by applicant. Sanenobu illustrates the ink compositions exhibit excellent regurgitation stability suitable for ink-jet printing; therefore it is deemed by the examiner that the conventional methods of claims 19-20 are read in the reference.

*Conclusion*

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sanza L McClendon whose telephone number is (571) 272-1074. The examiner can normally be reached on Monday through Friday 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Sanza L McClendon

Examiner

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